

October 22, 2004

Publication 1346 Part I - File Specification Changes #3

The changes are identified by two vertical bars in the right margin (||).  
Deletions are identified by a hyphen followed by two vertical bars (-||).

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These changes are effective immediately January 14, 2005.

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ERC 0403      Revised text

ERC 1096      New ERC

Part 1 - File Specification, Section 1 Data Communications Processing charts for 1040 was revised to include Forms 8833 and 8891

Part 1 - File Specification, Section 1 Data Communications third note was revised

Part 1 - File Specification, Section 1 Data Communications  
Subsection .05 Problem Transmissions items 3 and 4 were revised

Part 1 - File Specification, Section 2 Transmission File Format  
Item 2(c) was revised

Part 1 - File Specification, Section 3 Acknowledgement File Format  
Subsection 4 note was revised

Part 1 - File Specification, Section 12.03 Data Communications was revised

## **SECTION 1 - DATA COMMUNICATION**

After pre-processing on the FEPS, the returns will be routed to their appropriate UNISYS machines **at the ECC located at** Martinsburg or Memphis. All inquiries regarding transmission, rejects and problems should be directed to ANSPC, AUSPC, or MSPC as appropriate, by calling the toll-free e-Help Desk number at 1-866-255-0654. All inquiries regarding PATS should be directed to ANSPC and AUSPC as appropriate, by calling the toll-free e-Help Desk number.

**NOTE:** Transmitters who elect to use high-speed lines or expect to handle a large volume of electronic returns may request to lease their own dedicated line(s) at either **the ECC located at Martinsburg or Memphis**. They must arrange to lease and install the lines and purchase modems **or routers** at both ends.

For more information and approval, contact:

Internal Revenue Service  
ATTN: Darryl Giles  
EMS Development Section **OS:CIO:I:B:F:EI:ES**  
NCFB A5-357  
5000 Ellin Rd.  
Lanham, MD 20706

**NOTE:** Transmitters who wish to file through their internet service provider (ISP) must acquire e-file software that incorporates Secure Socket Layer (SSL) with a telnet/s protocol and the interface to the IRS gateway to the FEPS. Software Developers may request interface control document by sending a request to [e-file.transmission.encryption@irs.gov](mailto:e-file.transmission.encryption@irs.gov).

**NOTE:** The FEPS uses a menu driven interface. The IRS systems are designed to handle large volume transmissions. The practice of transmitting many small batches saturates the indices and degrades the systems. Dial-up transmitters should not transmit more than 500 electronic returns per transmission **because if disconnected, the long distance charges to retransmit could be costly.**

Dedicated, leased line transmitters may file up to 10,000 returns per transmission (Return Sequence Numbers 0000-9999); **if fewer** than 10,000 returns, the IRS recommends filing once per drain. Peak filing occurs around the "drain" times, which are posted on the Electronic Filing Bulletin Board System and the e-file professional page at [www.irs.gov](http://www.irs.gov).

(859) 292-0137 - **not** a toll-free call)

To assist transmitters in scripting automated logins and transmissions, see Section 1, Data Communication (Subsection .06) for Guidelines on Scripting.

## SECTION 1 - DATA COMMUNICATION

### .05 Problem Transmission

1. When the transmitter disconnected during a transmission, or when the FEPS detected a transmission format error, the FEPS will send a Communications Error Acknowledgement (ACK) File, which indicates why the transmission was not processed.
2. The Communications Error ACK File will be sent any time a transmission level error is detected, whether or not other Acknowledgement records are ready to be picked up. A Communications Error ACK File will NOT be sent if the transmitter only picks up Acknowledgement files, and then selects logoff to disconnect the line.

3. **Dial-up Transmitters should not transmit more than 500 electronic returns transmission because if disconnected, the long distance charges to retransmit could be costly.** If the transmitter is not using file compression, fixed format data will take a longer amount of time to transmit than variable format data. If more than 500 returns are ready to be transmitted via dial-up, they should be sent in subsequent transmissions. -||

**NOTE: If a transmitter is using one of the high-speed transfer protocols, up to 10,000 returns may be filed per transmission.** -||

4. The FEPS does not support ZMODEM or YMODEM Checkpoint/Restart.

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### 5. Layout of Communications Error Acknowledgement File

- a. Each Communication Error Acknowledgement File will have a sequence number assigned and the file will be sent to the transmitter in the order of the error.

Example: A transmitter's first transmission was successful, but the second one was aborted because of line noise. The first ACK File would be a regular one regarding acceptance/rejection of the returns within the transmission, followed by a Communications Error ACK File regarding the aborted transmission. Since the first transmission was sent on to the UNISYS for processing, the Acknowledgement for this file will be returned to the Trading Partner at a later time than the Communication Error ACK was returned.

## **SECTION 2 - TRANSMISSION FILE FORMAT**

### **.01 General Description**

1. All transmission data must be in ASCII format. No binary fields may be transmitted.
2. A transmission session will normally consist of three parts:
  - a. First, the communications link must be established using acceptable protocol.
  - b. Next, the transmitter will receive the Acknowledgement transmission containing information about the previous transmission session, **if an Acknowledgement file exists.**
  - c. Then, the return record transmission may commence. The return record transmission will consist of 1) a series of logical records, beginning with the TRANA record, 2) some number of logical return records, and 3) a RECAP Record.

**CAUTION: Dial-up filers should not file more than 500 returns per Transmission, because if the line is disconnected, they will incur long distance charges for the initial partial transmission and the subsequent re-transmission. Dedicated lease line filers can file a maximum of 10,000 returns per transmission (Return Sequence Numbers 0000 - 9999).** -||  
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3. All return records must be in ascending order by Declaration Control Number (DCN) and Return Sequence Number (RSN).
4. Two four-byte fields (the Record Control Information) must precede each record within a transmission. The first four-byte field is a record Byte Count that will contain a count of the number of bytes within the logical record including the four bytes for the counter itself, four bytes for the Start of Record Sentinel (\*\*\*\*), and one byte for the Record Terminus Character (#). The second four-byte field will be the Start of Record Sentinel, which must be four asterisks (\*\*\*\*).
5. Every record must have the Record Terminus Character (#) as its last significant byte.

**Note:** Provisions have been made to allow for **non-significant padding** to exist following the Record Terminus Character, i.e., CR or LF may be added after the Record Terminus Character to fill up a physical block size. This is permitted to accommodate all the different computer systems being used to transmit data.

6. The first records on a transmitted file, the TRANA and TRANB Records, contain information regarding the transmitter and file format. The tax return records should follow these records.

## **SECTION 3 - ACKNOWLEDGEMENT FILE FORMAT**

### **.04 How to Batch and Match Returns with Acknowledgement Files**

#### **1. File Names**

The following information is provided to filers who may not be aware of how to batch their returns and match them up later with Acknowledgement Files. Because filers request to "re-hang" Acknowledgement Files so frequently, it may be that their software is not reading and storing properly the ACK File Name(s) that appear within the ACK File Transmission. **The ACK File Name is generated by the Front-End Processing Subsystem (FEPS) as a 20 byte GTX Key and passed onto the UNISYS with the return file.** After UNISYS processing, this ACK File Name is returned with the ACK file in the RECAP record. When the ACK file is returned to the Transmitter, it is renamed to a DOS 8.3 byte format called the ACK Reference File Name with an extension. The name contains the same month and day from the GTX Key, a 4 digit sequence number assigned by the FEPS for that transmission, followed by the extension. See **Figure 34** for an explanation of the extension.

#### **How to Batch Returns**

Returns are to be transmitted, using the following specifications from the latest version of the Electronic Return File Specifications and Record Layouts.

- a. In Part II, **Section 1**, the record layout for the TRANA, the first record in any transmission, indicates where the return file batch information is to be entered.
- b. In Field 0060, the 5 digit ELECTRONIC TRANSMITTER IDENTIFICATION NUMBER (ETIN) assigned by the IRS, is entered. This is followed by TRANSMITTER'S USE CODE, 2 digits of the transmitter's choice to specify the type of returns (some transmitters use this field to identify which office or branch it belongs to or if it is a RAL return, etc.). It can also be left blank or zero filled.
- c. In Field 0070, the 3 digit JULIAN DAY (001-365) follows. Field 0080 is composed of 2 digit TRANSMISSION SEQUENCE NO (00-99) for the above Julian Day.
- b. In Part II, **Section 2**, the record layout for the TAX RETURN RECORD for page 1 of either the Form 1040, 1040A, or 1040EZ, indicates where the RETURN SEQUENCE NUMBER is entered, which is used for each return within the batch identified in the TRANA record above.
- c. Field 0007, the 16 digit RETURN SEQUENCE NUMBER (RSN), is composed of the following sub-fields:
  - a. ETIN of Transmitter
  - b. TRANSMITTER'S USE FIELD
  - c. JULIAN DAY  
OF TRANSMISSION
  - d. TRANSMISSION SEQUENCE NUMBER
  - e. SEQUENCE NO. OF EACH RETURN

5n	=	Field 0060 of the TRANA
2n	=	Field 0060 of the TRANA
3n	=	Field 0070 of the TRANA
2n	=	Field 0080 of the TRANA
		(00-99)
4n	=	0000-9999

**NOTE:** Dial-up filers should not file more than 500 returns per transmission because if the line is disconnected, they will incur long distance charges for the initial partial transmission and the subsequent re-transmission. Dedicated leased line filers can file a maximum of 10,000 returns.

## Section 12 - Federal/State Electronic Filing Specifications

### .03 Data Communications

All e-file returns will be transmitted to two transmission centers, **Martinsburg** Submission Processing Center (ECC-MTB) and Tennessee Computing Center (**ECC-MEM**). The data communications procedures described in Section 1 will be the same for transmitting Federal/State electronic returns as for transmitting federal electronic returns. Federal/State electronic returns are to be transmitted based on the following state home center relationship:

Home Service Center	Transmit Site	States Supported
Andover	<b>ECC-MTB</b> <sup>1</sup>	CT DC DE MD NJ NY PA RI VA VT
Austin	<b>ECC-MTB</b> <sup>1</sup>	IA IL KS MO NM OK WI
Kansas	<b>ECC-MEM</b> <sup>2</sup>	IN KY MI OH SC WV
Memphis <sup>3</sup>	<b>ECC-MEM</b> <sup>2</sup>	AL AR GA LA MS NC
Philadelphia	<b>ECC-MTB</b>	AZ CO HI ID MT ND NE OR UT

IRS will reject Federal/State returns that are not submitted to the correct home service center. The correct home Submission Processing Center is always the center supporting the state of the taxpayer's residence. In other words, if it is a Federal/State electronic return, always transmit it to the home Submission Processing Center that supports the state. For federal returns only, the ERO should always transmit to supporting home service center. For Online federal returns, transmission should be based on taxpayer's address.

<sup>1</sup> ECC-MTB represents Martinsburg, West Virginia

<sup>2</sup> ECC-MEM represents Memphis, Tennessee

<sup>3</sup> Effective July 1, 2005 this Home Service Center will become Kansas City. The Transmit site will not change.

## ATTACHMENT 1

### ERROR REJECT CODE (ERC) CROSS REFERENCES

<u>ERC</u>	<u>DESCRIPTION</u>	
0403	o State Record - The Consistency Section of the Generic Record must equal the corresponding federal Tax Form entry.	-
1096	o Summary Record - Count of Allocation Record (SEQ 0105) must equal the count of Allocation Record computed by the IRS.	